## Contents Ecological Modelling, Vol. 55

VOL. 55 NOS. 1/2	ULY 1991
Trophic unfolding of a continental shelf energy-flow network	
T.P. Burns, M. Higashi (Kyoto, Japan), S.C. Wainright (Woods Hole, MA, U	SA)
and B.C. Patten (Athens, GA, USA)	
Predicting chemical concentration effects on transformation rates of dissolved orgaby complex microbial assemblages	nics
D.L. Lewis and D.K. Gattie (Athens, GA, USA)	27
V.B. Vasiliev and V.A. Vavilin (Moscow, USSR)	47
A.S. Papadopoulos, R.C. Tiwari and M.J. Muha (Charlotte, NC, USA)	57
A simple model for seaweed growth and optimal harvesting strategy	
C.S. Lee (Kuala Lumpur, Malaysia) and P. Ang, Jr. (Vancouver, B.C., Canada) Hyperbolic law of reliability and its logarithmic effects in ecology	
B.S. Fleishman (Moscow, USSR)	75
Dislodgement of Heliothis zea (Lepidoptera: Noctuidae) eggs from cotton due to a and wind: a predictive model	rain
G.S. Nuessly, A.W. Hartstack, J.A. Witz and W.L. Sterling (College Station,	TX,
USA)	89
Population dynamics of Aphis pomi: a transition matrix approach	
M.E.J. Woolhouse (Oxford, U.K.) and R. Harmsen (Kingston, Ont., Canada)	103
Estimate of the size of a hunted population	
J. Badia, F. Spitz and G. Valet (Castanet Tolosan, France)	113
Classified and representative method – a useful way to select variables in ecology	
P. Sun and C. Lin (Beijing, P.R. China)	123
Composite growth type of population growth	
P. Sun and C. Lin (Beijing, China)	133
A note on an extension of Schaefer's model	141
S. Ganguly and K. Chaudhuri (Calcutta, India)	141
Announcements	153
Guide for Authors	154
VOL. 55 NOS. 3/4 AUGU	UST 1991
Quality as a characteristic of ecological models	
B. Zeide (Monticello, AR, USA)	161 soil
M.I. Sheppard and J.L. Hawkins (Pinawa, Man., Canada)	175
Simulation of fish population responses to exploitation	175
A.L. Jensen (Ann Arbor, MI, USA)	203

Nutrient gradients and spatial structure in tropical forests: a model study  M. Boersma, C.P. van Schaik and P. Hogeweg (Utrecht, Netherlands)	219
Application of the nitrogen-tillage-residue-management (NTRM) model for corn grown in low-input and conventional agricultural systems	2
J.K. Radke (Kutztown, PA, USA), M.J. Shaffer (Fort Collins, CO, USA), K.S. Kroll	
and J. Saponara (Kutztown, PA, USA)	241
Modelling the population dynamics of different aphid genotypes in plant variety mixtures	
L.R. Wilhoit (Berkeley, CA, USA)	257
Time and energy budgets of Cassin's Sparrow (Aimophila cassinii) during the breeding season: evaluation through modelling	
J.L. Schnase, W.E. Grant (College Station, TX, USA), T.C. Maxwell (San Angelo,	
TX, USA) and J.J. Leggett (College Station, TX, USA)	285
Author Inder	321

